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Akira Kudo

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STAAS & HALSEY LLP

SUITE 700

1201 NEW YORK AVENUE, N.W.

WASHINGTON, DC 20005

EXAMINER

NGUYEN, VAN H

ART UNIT

PAPER NUMBER

2194

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/874,283

Applicant(s)

KUDO ET AL.

Examiner

VAN H. NGUYEN

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 4,6,8,10,14,16,20-22 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 4,6,10,14,16,20-22 and 24-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

1. This communication is responsive to the amendment filed application filed 09/05/2006.

Claims 4, 6, 8, 10, 14, 16, 20-22, and 24-27 are currently pending in this application.

Claims 1, 3, 7, 9, 17, 19, and 23 have been cancelled.

## Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 4, 6, 10, 14, 16, 20-22, and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by **Materna et al.** (US 4,714,995).

### As to claim 24:

Materna teaches an integrated information processing system integrating a plurality of information processors each having a storage (*e.g., a system for integrating a number of host computers having heterogeneous data bases so that any identical data items in the data bases are*

*maintained consistent with each other ... The local data bases of the various host computers are referred to as heterogeneous because they have different organizational schema or structures and different record formats for storing data) [see the Abstract and the discussion beginning at col. 5, line 8], the system comprising:*

- *a collaboration information storage that stores collaboration information on a communication method between the information processors (e.g., Integration of these different data bases, which is the principle object of this invention, means ensuring that data items which are common to two or more data bases are consistent with each other, i.e., ensuring that common data items have identical data values. Integration requires that when a host computer updates the value of a data item in, or adds a new data item to, its local data base, this change must be replicated in all the other host computers' local data bases which contain the same data item. For example, if a CAD system changed a dimension of a part, the same change should be made (i.e., replicated) in the stored value of that part's dimensions in the CAM and MRP data bases... the updates to shared data are transmitted to a central location and then replicated in a translated form for distribution to other data bases. This is shown in general form in FIG. 1, in which two host systems 10 are connected to a common local area network 12, and a third remotely-located host 10' is connected to the same network through a communication link 14. In practice, the number of interconnected hosts is likely to be greater than the three shown in FIG. 1. The host systems 10 and 10' are independent computer systems having independent local data bases, indicated at 16 and 16'. Although each of these local data bases is independently accessed and*

*controlled by its respective host system, each local data base has some data elements, indicated diagrammatically at 18 and 18', that are common to (i.e., duplicated in) one or more (but not necessarily all) of the other local data bases. Such data is referred to as "common data" 18. In general, a local data base will have certain data items in common with one of the other data bases and different data items in common with another of the data bases) [see the integration engine discussion beginning at col.5, line 27]; and*

- *a data perpetuation object apparatus that refers to the stored collaboration information and performs a unified management of the data managed by the information processors (e.g., a computer (and software) system, referred to as the integration engine 20, is coupled via a communications network 12 (preferably a local area network) to the host computers 10 and 10'. The integration engine 20 has four principal components: a data translator 22, an information query processor 24, a disk storage module 26, and a control console 28. The disk storage module 26 may be accessed by both the data translator 22 and the query processor 24. Also, the data translator 22, query processor 24 and control console 28 are either loosely or tightly coupled together by means of either another communication network...the integration engine 20 is performed by update translator 22, which receives updates of common data from the local data bases, translates the data into the appropriate format for the other data bases which contain the same data items, and then sends the translated data to the other data bases) [see the integration engine discussion beginning at col.5, line 27 and col. 6, line 12].*

**As to claim 25:**

Materna teaches an information identification object generator that generates an information identification object used in determining information to be stored in each of the storages of the information processors (*e.g., The dictionary module 64 contains information with respect to each common data base entity. This information includes, for each entity, an entity name, an alternative name (if necessary), node number identifiers of each local data base that contains the entity, an indication of the schema classification, an update template for each schema, the owner identification, and possible descriptive information concerning the entity. This dictionary information can be stored in any convenient format for access through a data base management system (DBMS) 84 [see the discussion beginning at col.10, line 29].*

**As to claim 26:**

Materna teaches a role object generator that generates a role object as an active role with respect to an, information processor that is a data transmission origin, and a role object as a passive role with respect to an information processor that is a data transmission destination (*e.g., When distribution module 62 is ready to transmit updates to one of the host computer systems 10, the distribution module requests the external communications module 60a to send the local computer a SEND command, together with the accompanying data and the intended destination of the data. (Depending on the actual communications protocol employed to communicate over the network 12, each SEND, RECEIVE or AUDIT command may have to be preceded by a CONNECT command to establish communication between the data*

*translator 22 and the update manager 32 of a desired host computer system 10.) From the point of view of the distribution module 62, once a SEND command is issued, the external communications module will automatically transmit the message, and the distribution module may continue performing other functions...The RECEIVE command is basically a polling command, instructing a selected host computer system to transmit either data transactions, status acknowledgment messages, or AUDIT responses (described in the next paragraph) that are ready to be transmitted. The data translator 22 may also request that a general status message be transmitted back from a host computer, to provide overall status information to the integration engine 20) [see the discussion, beginning at col. 9, line 22].*

**As to claim 27:**

Materna teaches a relating object generator that refers to the stored collaboration information and generates a relating object used in transmitting information to be stored in each of the storages of the information processors based on whether the information processor is a data transmission origin or a data transmission destination (e.g., *When distribution module 62 is ready to transmit updates to one of the host computer systems 10, the distribution module requests the external communications module 60a to send the local computer a SEND command, together with the accompanying data and the intended destination of the data.* (Depending on the actual communications protocol employed to communicate over the network 12, each SEND, RECEIVE or AUDIT command may have to be preceded by a CONNECT command to establish communication between the data translator 22 and the update manager 32 of a desired host computer system 10.) From the point of view of the

*distribution module 62, once a SEND command is issued, the external communications module will automatically transmit the message, and the distribution module may continue performing other functions...The RECEIVE command is basically a polling command, instructing a selected host computer system to transmit either data transactions, status acknowledgment messages, or AUDIT responses (described in the next paragraph) that are ready to be transmitted. The data translator 22 may also request that a general status message be transmitted back from a host computer, to provide overall status information to the integration engine 20) [see the discussion, beginning at col. 9, line 22].*

**As to claim 20:**

Refer to claims 24-27 above for rejection.

**As to claim 21:**

Materna teaches timing information on timing of passing of information between the plurality of information processors [e.g., see the discussion beginning at col.3, line 14].

**As to claim 22:**

Materna teaches the communication is selected from, among other things, batch communication (e.g., transmitted as a batch) [see the discussion, beginning at col. 9, line 22].

**As to claim 14:**

Refer to claims 24-27 above for rejection.



**As to claim 16:**

Refer to claims 22 above for rejection.

**As to claim 10:**

Refer to claims 24-27 above for rejection.

**As to claim 4:**

Refer to claims 24-27 above for rejection.

**As to claim 6:**

Refer to claims 22 above for rejection.

### **Indication of Allowable Subject Matter**

3. Claim 8 appears to be allowable over the prior art of record, subject to a final search.

### **Response to Arguments**

4. Applicant's arguments filed 09/05/2006 have been fully considered but they are not persuasive.

Applicant argues that the Examiner indicated that independent claim 8 is allowable, in particular because of the feature of "data perpetuation object"...each of independent

claims 4, 10, 14, 20, and 24...recite such a "data perpetuation object"...distinguish over the cited art [Remarks, page 8].

In response, in the previous in-person interview the Examiner indicated that independent claim 8 with all functionalities of "data perpetuation object" is allowable **when taken in the context of claim 8 as a whole**, not the limitation itself.

Applicant argues capture module 31...does not teach generating an information identification object that determines determining information to be stored in a storage apparatus of each information processing means. [Remarks, page 9].

In response, note the rejection as modified above to see how Materna meet the claim limitation.

Applicant argues the integration engine 20 of Materna does not teach a collaboration apparatus between information processing systems or the data perpetuation object apparatus of the present invention which has a function of dynamically generating objects such as "a role object as an active role", "a role object as a passive role", "a relating object", and "an information identification object" [Remarks, page 10].

In response, Materna does teach a collaboration apparatus between information processing systems or the data perpetuation object apparatus between information processing systems or the data perpetuation object apparatus (*e.g., Apparatus for*

*integrating independent computer systems with associated heterogeneous data bases ... transmits the translated replicas to the appropriate separate computer systems, where the updates are directly or indirectly entered into the corresponding data bases, thereby ensuring consistency among the separate but related data bases; see the Abstract). Also, Materna's teaching "when distribution module 62 is ready to transmit updates to one of the host computer systems 10, the distribution module requests the external communications module 60a to send the local computer a SEND command, together with the accompanying data and the intended destination of the data. (Depending on the actual communications protocol employed to communicate over the network 12, each SEND, RECEIVE or AUDIT command may have to be preceded by a CONNECT command to establish communication between the data translator 22 and the update manager 32 of a desired host computer system 10.) From the point of view of the distribution module 62, once a SEND command is issued, the external communications module will automatically transmit the message, and the distribution module may continue performing other functions...The RECEIVE command is basically a polling command, instructing a selected host computer system to transmit either data transactions, status acknowledgment messages, or AUDIT responses (described in the next paragraph) that are ready to be transmitted. The data translator 22 may also request that a general status message be transmitted back from a host computer, to provide overall status information to the integration engine 20" [see the discussion, beginning at col. 9, line 22] meets generating objects such as "a role object as an active*

*role", "a role object as a passive role", "a relating object", and "an information identification object."*

It is noted that "*dynamically generating*" is not claimed. Claimed subject matter, not the specification is the measure of the invention. Limitations in the specification cannot be read into the claims for the purpose of avoiding the prior art. See *In re Self*, 213 USPQ 1,5 (CCPA 1982); *In re Priest*, 199 USPQ 11, 15 (CCPA 1978). The Examiner has a *duty* and *responsibility* to the public and to Applicant to interpret the claims *as broadly as reasonably possible* during prosecution (see *In re Prater*, 56 CCPA 1381, 415 F.2d 1393, 162 USPQ 541 (1969)). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

During patent examination, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." *In re Hyatt* 21 1 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. *In re Prater*, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). See also *In re Zletz*, 893 F.2d 319, 321-22, 13 USPQ2d 1320, 1322 (1989) "During patent examination the pending claims must be interpreted as broadly as their terms reasonably allow.... The reason is simply that during patent prosecution when claims can be amended, ambiguities should be recognized, scope and breadth of language explored, and clarification imposed.... An essential purpose of patent examination is to fashion claims that are precise, clear, correct, and unambiguous. Only in this way can uncertainties of claim scope be removed, as much as possible, during the administrative process."

Applicant should set forth claims in language that clearly, distinctly, unambiguously, and uniquely define the invention.

### **Conclusion**

5. The prior art made of record, see PTO 892, and not relied upon is considered pertinent to applicant's disclosure. Applicant should review these references carefully before responding to this office action.

### **Contact Information**

6. Any inquiry or a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H. NGUYEN whose telephone number is (571) 272-3765. The examiner can normally be reached on Monday-Thursday from 8:30AM-6:00PM. The examiner can also be reached on alternative Friday. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WILLIAM THOMSON can be reached at (571) 272-3718.

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The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**Any response to this action should be mailed to:**

Commissioner for patents  
P O Box 1450  
Alexandria, VA 22313-1450



Van H. Nguyen  
Patent Examiner, AU 2194